

Historic, archived document

Do not assume content reflects current
scientific knowledge, policies, or practices

UNITED STATES DEPARTMENT OF AGRICULTURE
 WASHINGTON, D. C.

THE POTOMAC RASPBERRY

 By GEORGE M. DARROW, *Senior Pomologist*, and GEORGE F. WALDO, *Assistant Pomologist*, Division of Horticultural Crops and Diseases, Bureau of Plant Industry

CONTENTS

	Page		Page
Introduction.....	1	Technical description.....	4
Origin and adaptation.....	1	Cultural requirements.....	4
Characterization.....	2	Naming and introduction.....	4

INTRODUCTION

The purple raspberry variety ¹ described in this circular is worthy of trial in nearly all regions where black, red, and purple raspberries are now grown. It is being introduced because it is apparently superior to the existing varieties of purple raspberries in that it is much more resistant to several serious fungous diseases, is free from virus diseases, is more vigorous and productive, and is better suited to canning and preserving. It has been hardy wherever grown and is apparently adaptable to a wide range of climatic conditions. It is superior in disease resistance to the black, and is far superior to and easier to pick than the red sorts. Its disadvantages are its purple color and its relative seediness as compared with the red sorts, though it is not as seedy as the black raspberries. It is too acid to rank high in dessert quality, but it does rank high in preserving quality and has been selected for this purpose as the best among a large number.

ORIGIN AND ADAPTATION

The Potomac (U. S. D. A. No. 161) originated from a cross of the Farmer black raspberry and the Newman red raspberry, made in 1921 at the United States Plant Field Station near Glenn Dale, Md. It was selected in 1924 for further propagation and since 1925 has been consistently chosen as one of the most vigorous, productive, and firm-fruited selections of all the many seedlings growing where it originated. Tests of this berry in New Jersey, Michigan, Ohio, and Oregon show it to be equally as vigorous there as under Maryland

¹ Purple raspberries result from crosses of the black with the red varieties. The plants have greater vigor than either parent; they grow and are propagated and trained like black raspberries. The berries are borne in clusters somewhat like those of the black varieties and are much more easily picked than the fruit of the red sorts. The berries are usually of various shades of purple, are less attractive than the berries of red or black sorts, and are usually more seedy than the common red and less seedy than the black sorts. They are mostly tart and highly flavored and are highly prized for jam, preserves, canning, and flavoring.

conditions. Because it is unusually free from the serious raspberry diseases in Maryland, New Jersey, and Ohio, it is thought to be well adapted to regions still farther south.

CHARACTERIZATION

Since it originated as a cross between a black and a red raspberry, the Potomac has characteristics of both parents. However, because its habit of growth is that of a black raspberry, it seems better to compare it with black raspberries. It propagates easily by tip layering, as do black raspberries, and does not send up shoots from the roots like red raspberries. The tip plants are small in comparison with black-raspberry tip plants, but are as large as those of other purple-raspberry varieties now in the trade. It makes a very vigorous, erect cane growth (fig. 1), especially the first year, and under



FIGURE 1.—A well-grown bush of the Potomac raspberry at New Milford, Ohio, in full fruit. Note the erect growth and the fruiting habit which make it easier to pick than the red varieties

favorable conditions a full crop has been harvested the second summer. Each plant makes a large number of canes. The leaves are dark green, with prominent midribs and veins. The prickles are small and not very numerous.

The fruiting laterals are long and produce a large number of flowers and fruits. (Fig. 2.) The Potomac averaged 20 to 25 berries per fruiting lateral compared with 10 to 12 per fruiting lateral on a Cumberland black raspberry planted at the same time in an adjoining row. Moreover, the Potomac averaged more laterals and canes per plant and was far more productive. The laterals droop and may even break when loaded with ripening fruit. The berries are large, firm, dark purplish red in color, covered with considerable bloom, and

of good flavor. When the Cumberland averaged 400 berries per heaped quart the Potomac averaged 360. The seeds are prominent. Tests made in the research laboratories of the National Preservers' Association have shown that it makes a very fine raspberry preserve, superior in flavor to that made from black or red raspberries, though



FIGURE 2.—A fruit cluster of the Potomac raspberry, illustrating its habit of producing fruit from several leaf axils

some persons may object to the rather prominent seeds. It is one of the very few raspberry varieties from which jelly may be made without the addition of pectin.

Its ripening season lasts almost one month at the station near Glenn Dale, Md., the first berries usually beginning to ripen about June 20 and ripening continuing to about July 20. Its season, al-

though beginning at the same time as that of the Cumberland black raspberry, continues about 10 days longer.

Anthraxnose (*Plectodiscella veneta*) has never been serious on this variety, even under conditions exceptionally favorable to the development of the disease on other purple and black raspberries growing beside it. Neither has this variety been found susceptible to leaf-spot diseases, although other raspberries growing beside it were almost completely defoliated in Maryland during the late summer of 1931, when conditions were very favorable to leaf-spot development. It is attacked by mildew, but not to the extent of seriously lessening the vigor of the plant. It has never been attacked by cane blight, although other purple and black raspberries growing beside it were severely attacked during the late summer of 1931. It has been attacked by *Verticillium* wilt in Oregon. Though the stock of the Potomac is free from virus diseases and may be somewhat resistant to them, it is not immune, for red-raspberry mosaic has been seen on it once in New Jersey.

TECHNICAL DESCRIPTION

Vigorous, canes erect, arching and rooting at the tips, terete, reddish purple, covered with fine bluish bloom, having a few hooked prickles but no bristles. Leaves 3-foliate, lateral leaflets sessile, terminal leaflet long-stalked, all leaflets pointed and sharply toothed, dark green above and gray tomentose beneath. Petioles stout, petiolules and midribs with few prickles. Flowering branches with few prickles and 3-foliate leaves. Flowers rather densely umbellate-corymbose at the top of the branches, medium long pedicels, 1-flowered to 3-flowered clusters in upper axils. Fruit midseason, large, hemispherical to very slightly conic, dark reddish purple covered with a light bloom; ships well; drupelets small with strong coherence; firm, subacid, quality good.

CULTURAL REQUIREMENTS

The Potomac normally makes a growth above the average for raspberries and should be planted at greater distances than are most other purple or black raspberries. The rows should be at least 8 feet apart, and in very rich soil 10 feet apart might not be too far. The distance between the plants should be from 5 to 7 feet. Pruning should be done the same as for black raspberries, except that the main canes should be pinched off at from 24 to 30 inches. In vigorous plants five to seven canes may profitably be left for fruiting. The lateral canes need not be pruned as short as is usually done in pruning black raspberries. Briefly, in most regions the tips of the new shoots should be pinched off at 24 to 30 inches in early summer, the laterals cut back to 12 to 14 inches in late winter, and the canes thinned to 5 to 7 per plant at that time.

NAMING AND INTRODUCTION

This raspberry is named for the Potomac River, which is a few miles distant from the experiment station where this variety originated. It is being introduced by cooperating nurseries. The United States Department of Agriculture has no plants for distribution.

